

determine the location of the credit card transaction terminal that is associated with the prospective credit card transaction by identifying a merchant that is associated with the credit card transaction terminal and obtaining at least one location of the merchant from a geographic information system. In some embodiments, a plurality of locations of the merchant may be obtained and the credit card transaction authorization processor may be configured to correlate the plurality of locations of the merchant and the location of the at least one wireless terminal, and to generate authorization information for the prospective credit card transaction based on the plurality of locations of the merchant and the at least one wireless terminal that were correlated.

[0011] In still other embodiments, the credit card transaction authorization processor is further configured to correlate the location of the credit card transaction terminal that is associated with the prospective credit card transaction, the location of the at least one wireless terminal that is associated with the credit card user, and a history of past credit card transactions for the credit card that took place prior to the prospective credit card transaction. Authorization information may be generated for the prospective credit card transaction based on the locations of the credit card transaction terminal and the at least one wireless terminal, and the history that were correlated.

[0012] In some embodiments of the invention, the authorization information for the prospective credit card transaction may be generated by transmitting a message to the at least one wireless terminal that is associated with the user of the credit card of the prospective credit card transaction. In other embodiments, a message may be transmitted to the credit card transaction terminal that is associated with the prospective credit card transaction. In still other embodiments, a message may be transmitted to a merchant terminal that is associated with the credit card transaction terminal. For example, the merchant terminal may be a wireless terminal of a clerk who is operating the credit card transaction terminal. Moreover, in some embodiments, the authorization information may be generated by obtaining a picture of the user of the credit card from the credit card issuer and/or from the wireless network provider, and transmitting the picture of the user of the credit card. In some embodiments, a date stamp for the picture may also be obtained and the picture may be selectively transmitted if the date stamp is sufficiently old.

[0013] It will be understood by those having skill in the art that embodiments of the invention have been described above in connection with credit card transaction servers. However, analogous systems, methods and computer program products also may be provided according to other embodiments of the present invention.

[0014] Credit card transaction authorization methods according to some embodiments of the present invention may selectively obtain first, second and third levels of user authentication for a prospective credit card transaction. In some embodiments, a first level of user authentication for a prospective credit card transaction is selectively obtained if all wireless terminals that are registered to a user of the credit card for the prospective credit card transaction are sufficiently close to a credit card transaction terminal for the prospective credit card transaction. Moreover, a second level of user authentication, that is greater than the first level, may be obtained for the prospective credit card transaction if at least one of the wireless terminals that are registered to the user is not sufficiently close to the credit card transaction terminal.

Finally, a third level of user authentication, that is greater than the second level, may be selectively obtained if the multiple wireless terminals are associated with multiple wireless network providers, and at least one of the multiple wireless terminals is not sufficiently close to the credit card transaction terminal. In some embodiments, the second or third level of user authentication may include transmitting a picture of the user that was obtained sufficiently before the prospective credit card transaction and verifying an identity of the user from the picture that was transmitted.

[0015] Credit card transaction authorization methods according to still other embodiments of the present invention may obtain a picture of a user of a credit card transaction terminal for a prospective credit card transaction from a wireless network provider that is associated with the user and/or from a credit card issuer that is associated with the prospective credit card transaction, along with a date stamp for the picture. The picture may be selectively transmitted to a location near the credit card transaction terminal, to allow an identity of the user to be verified, if the date stamp is sufficiently before the prospective credit card transaction.

[0016] It will be understood that various method embodiments of the invention have been described above. However, analogous server, system and computer program embodiments also may be provided according to other embodiments of the invention. Moreover, the various embodiments of the invention that are described herein may be combined in various combinations and subcombinations.

[0017] Other systems, methods, and/or computer program products according to embodiments will be or become apparent to one with skill in the art upon review of the following drawings and detailed description. It is intended that all such additional systems, methods, and/or computer program products be included within this description, be within the scope of the present invention, and be protected by the accompanying claims.

BRIEF DESCRIPTION OF THE DRAWINGS

[0018] FIG. 1 is a block diagram of user terminal location based credit card authorization servers, systems, methods and/or computer program products according to various embodiments of the present invention.

[0019] FIG. 2 is a flowchart of operations that may be performed for credit card transaction authorization according to various embodiments of the present invention.

[0020] FIG. 3A is a flowchart of operations that may be performed to correlate locations and/or generate authorization information according to various embodiments of the present invention.

[0021] FIG. 3B is a schematic diagram of locations of various elements of a credit card transaction according to various embodiments of the present invention.

[0022] FIGS. 4-8 are flowcharts of operations that may be performed during credit card transactions according to various embodiments of the present invention.

DETAILED DESCRIPTION

[0023] The present invention now will be described more fully hereinafter with reference to the accompanying figures, in which embodiments of the invention are shown. This invention may, however, be embodied in many alternate forms and should not be construed as limited to the embodiments set forth herein.